

## **REMARKS**

Claims 1, 2, 4-15, 44 and 45 are currently pending in the application. Claims 3 and 16-43 are canceled. Claims 1, 2 and 4-9 have been amended. Claims 45-47 have been added. The amendments find support in the specification and are discussed in the relevant sections below. No new matter is added.

### **I. Amendments to the Specification**

The paragraph at page 12, from line 23 through line 29, describing Figure 4b, is amended to clarify the correct Figure number. Support for the amendment is found at least at page 7, from line 23 through line 24. No new matter is added.

### **II. Amendment to the Claims**

With this amendment, Applicant has amended independent claim 1. Amended independent claim 1 now recites “an electrode pair attached to a substrate material” and “a branched carbon nanotube cantilever comprising: at least one ferromagnetic material and at least two tubules attached to the electrode pair”. Thus, amended independent claim 1 now contains allowable subject matter. Applicants have also amended dependent claims 2 and 4-9 to correct minor errors and more clearly define the invention. No new matter is added with any of the amendments. Support for the amendments herein is found throughout the Applicants’ specification as filed in at least the following passages: page 5, line 26 through page 6, line 9; page 10, lines 25-29; page 14, lines 2-6; page 15, lines 15-18; page 15, lines 19-21 and Figures 1-3.

### **III. Claim Rejection Under 35 U.S.C. § 102(e)**

Claims 1-15 and 44 are rejected under 35 U.S.C. §102(e) as being anticipated by Lee et al. (U.S. Patent No. 6,755,956).

The Office Action states that “Lee discloses a probe (see Fig. 6b) having a substrate 31, on which are formed catalyst dots 33 having attached thereon an array of nanotubes 35. The nanotubes are in a cantilever arrangement and the catalyst dots may be a ferromagnetic material as described in line 54 of col. 6. Note further that the array as described for example, under

EXAMPLE II are envisioned for use in scanning probe microscopy.” Applicant respectfully requests reconsideration and withdrawal of the rejection.

*Response*

Applicant has amended claim 1 to recite a micro-dimensional probe comprising “an electrode pair” attached to a substrate material” and “a branched carbon nanotube cantilever comprising: at least one ferromagnetic material and at least two tubules attached to the electrode pair”. As amended, Applicants’ claimed invention does not read on such as disclosed by Lee et al. Lee et al. does NOT disclose Applicants’ claimed probe. Lee et al. discloses a method of growing a linear carbon nanostructure. The carbon nanostructure disclosed in Lee et al. are linear carbon nanostructures (as shown in FIGS. 4, 6b, 7, 8b and 10), i.e., they do NOT contain a branched carbon nanotube cantilever comprising: at least one ferromagnetic material and at least two tubules attached to the electrode pair. Applicant respectfully requests reconsideration and withdrawal of the rejection.

Applicant submits that all claims are allowable as written and respectfully request early favorable action by the Examiner. If the Examiner believes that a telephone conversation with Applicant's attorney/agent would expedite prosecution of this application, the Examiner is cordially invited to call the undersigned attorney/agent of record.

Respectfully submitted,

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